

Alternatively, RF current may be delivered from the ablation/cooling console 104 in a bipolar arrangement. For example, Fig. 12 illustrates the use of the ablation probe 102 within a bipolar assembly. In particular, the ablation probe 102 is reciprocatably disposed within a cannula 150 having a distally mounted electrode 152. A bipolar relationship between the electrode 124 on the ablation probe 102, and the electrode 152 on the cannula 150, can be formed by electrically coupling the respective poles of the ablation/cooling console 104 to the electrodes 124 and 152. The distance between the electrodes 124 and 152 can be adjusted by distally or proximally sliding the ablation probe 102 within the cannula 150, thereby providing a means for adjusting the ablation results. Optionally, the ablation probe 102 may be removable from the cannula 150 in order to provide a means for delivering therapeutic agents to the treated region before or after the ablation process. In an alternative embodiment, thermoelectric devices 130 can be located on the cannula 150 adjacent the electrode 152, in addition to, or rather than, placing the thermoelectric devices 130 on the ablation probe 102 adjacent the electrode 124. Additional details regarding the structure and operation of adjustable bipolar ablation probes are disclosed in U.S. Patent Application Ser. No. ~~10/xxx,xxx~~ 10/828,032 (Attorney Docket Number 2024728-7035382001), which is expressly incorporated herein by reference. AT

The ablation/cooling console 104 additionally includes controlled cooling capability, and in particular, supplies DC voltage to the thermoelectric devices 130, which in turn, cool the electrode 124, and thus, the tissue in contact with the electrode 124. The ablation/cooling console 104 optionally has control circuitry (not shown) that turns the thermoelectric devices 130 off using temperature or impedance feedback, e.g.,